

Abstract Title Page

Title:

The Uneven Implementation of Universal School Policies: Maternal Education and Florida's Mandatory Grade Retention Policy

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Abstract Body

Background / Context: Research consistently demonstrates a strong, positive relationship between parents' socioeconomic status and children's educational achievement. This achievement gap is already present when children enter school in kindergarten and, despite the numerous policies aimed at leveling the educational playing field for disadvantaged students, it does not dissipate as children progress in their schooling (Duncan & Magnuson, 2011).

Universal educational policies are a popular tool to address inequalities, with the underlying belief being that disparities can be overcome by holding all students to the same high standards and ensuring that all families have access to the same opportunities. However, these policies may be ineffective – and may actually exacerbate inequality – if families of high-socioeconomic status are better able to advocate for their children, make informed decisions, circumvent policy, or take advantage of opportunities in their children's schooling.

There is mounting evidence that parents' behavior regarding their child's schooling does in fact differ depending on socioeconomic status. Parents of lower-socioeconomic status have been found to be less likely to request a specific teacher (Jacob & Lefgren, 2005), challenge their child's placement into a lower curriculum track (Barg, 2012), and question the pedagogical authority of their child's teacher during parent-teacher conferences (Weininger & Lareau, 2003). Ethnographic work by Lareau and Calarco (2012) found that compared to lower-class parents, middle-class parents had greater knowledge of their child's school environment and experiences, and were aware of a much wider variety of opportunities for intervention in their child's schooling. Where middle-class parents "approached interactions with the school as an ongoing negotiation" (Lareau & Calarco, 2012, p. 74) lower-class parents rarely asked for any educational modifications even when they felt that their child might benefit from one.

These differences in parents' behavior can amount to real impacts on the effectiveness of educational policy, and have important educational consequences for children. One example is school choice. Heralded as a mechanism to level the playing field between children in different neighborhoods, school choice policies allow children living in neighborhoods with poorer performing schools to have options beyond their neighborhood school. The evidence suggests, however, that less-educated and lower-income parents respond differently than middle-class parents when presented with a choice among schools, resulting in increased segregation by socioeconomic status without improved academic performance for disadvantaged students (Hsieh & Urquiola, 2006; Fiske & Ladd, 2000; Cullen et al., 2005). Hastings, Kane, and Staiger (2006a) specifically find that the preference for school's mean test score increases with parent's income while preference for proximity decreases, resulting in two distinct types of parents – those with a preference for test scores regardless of proximity, who are more likely to be higher-income, and those with a preference for proximity regardless of test scores, who are more likely to be lower-income. These differences in preferences among parents translate into differences in academic achievement by socioeconomic status. Children of parents who placed high weights on academics experienced academic gains when randomly assigned to their first-choice school, while children of parents who placed a low weight on academics experienced academic losses (Hastings, Kane & Staiger, 2006b).

Purpose / Objective / Research Question / Focus of Study: Despite the potential for socioeconomic differences in parental knowledge, preferences, and behaviors to exacerbate inequality, there is little large scale empirical evidence on the impact of parents' socioeconomic status in the face of a broad policy that is intended to be enforced universally. The current examples from the literature have consisted of situations that either *require* an active choice by

parents, in the case of school choice, or are cases where parents can choose to intervene regarding discretionary school decisions not based on formal policy. This paper builds upon the prior research into socioeconomic status, parental behavior, and academic achievement, by exploring the idea that due to these socioeconomic differences in behavior, seemingly universal educational policies may be differentially enforced for students of different backgrounds. We examine whether a statewide policy enacted in Florida in 2002, mandating that promotion to the fourth grade be conditional upon meeting a minimum standard of reading, resulted in differential retention dependent on mothers' level of education. We use maternal education as the defining indicator of socioeconomic status because it has been found to be the strongest predictor of children's academic achievement (Haveman & Wolfe, 1995) and we believe that the mechanisms which would likely lead to differential exemption, namely having the knowledge, agency, and desire to intervene in the policy's implementation, are most likely to be impacted by maternal educational attainment.

Setting: The third grade retention policy was enacted in 2002 and began to affect all third-grade students in public schools across the state of Florida during the 2002-03 school year. Florida is the third most populous state and in the nation.

Population / Participants / Subjects: Analyses are conducted on students who were born in the state of Florida and who entered third grade in a Florida public school for the first time between 2002 and 2009 (930,606 students).

Intervention / Program / Practice: In 2002, the Florida legislature mandated that third-grade students meet the Level 2 benchmark or higher (the second lowest of five levels) on the Florida Comprehensive Assessment Test (FCAT) reading exam in order to be promoted to the fourth-grade. The focus on third grade reading scores highlights the belief among educators that it is at this time when reading proficiency becomes crucial for success across subjects, and children transition from "learning to read" to "reading to learn." Students who do not score at a Level 2 or higher, and do not obtain an exemption, are subject to retention in conjunction with a number of other interventions intended to ensure that they are able to be promoted the following year. Retained students must also be assigned to a high performing teacher, receive intensive reading instruction during their retained year, and be given the opportunity to attend a summer reading program prior to the next school year.

There are a number of 'good cause exemptions' that allow students to be promoted to the fourth-grade despite failing to score at the Level 2 benchmark or above. Students are eligible for an exemption if they have limited English proficiency and have received fewer than two years of instruction in English for Speakers of Other Languages Program, have certain disabilities and an Individualized Education Program (IEP) stating that the test is an inappropriate measure of achievement for the student, or have received intensive reading remediation for two years and have already been retained twice between kindergarten and third grade. Additionally, students are able to obtain an exemption by demonstrating that they are reading at a level equal to or above a Level 2 on the FCAT by performing at an acceptable level on an alternative standardized reading assessment approved by the State Board of Education (51st percentile or above on the Stanford-10 reading exam – a level of proficiency much higher than that needed to meet a Level 2 on the FCAT), or by demonstrating proficiency through a teacher-developed portfolio.

Research Design: Because the Florida policy relies on a strict score cutoff for determining retention, we employ a regression-discontinuity design to look at differences in the implementation for the marginal student. We present both graphical evidence and difference-in-difference estimates of the impact of scoring just below the promotion cutoff for students with

mothers of differing levels of education, subtracting out differences in retention probabilities between maternal education groups just above the promotion cutoff. This allows us to look at differences in the impact of scoring just below the promotion cutoff on retention, with differences between groups just above the promotion cutoff serving as a counter-factual for what we would expect to see in the absence of the policy.

$$R_i = \phi + \delta F_i + k(S_i) + k(S_i) * F_i + \gamma E_i + \lambda E_i * F_i + k(S_i) * E_i + k(S_i) * F_i * E_i + \xi X_i + \psi X_i * F_i + k(S_i) * X_i + k(S_i) * F_i * X_i + Year * School + v_i$$

where R_i is the probability of retention for student i , F_i is an indicator for failing to meet the promotion cutoff, $k(S_i)$ is a polynomial function of the relative reading score, E_i is a set of indicators for the level of education of student i 's mother, X_i is a vector of student demographic and academic characteristics, and v_i is an error term. Year by school fixed effects are included to take into account differences in exemptions by school and cohort, thus students are being compared to other students within their school during the same year. We estimate these impacts with the following equation:

Using this framework the estimates of interest are δ and λ . δ can be interpreted as the percentage point increase in retention probability associated with falling below the promotion cutoff, or the jump in probability of retention at the discontinuity, for students whose mothers have less than a high school degree. λ is the percentage point difference in the jump in probability of retention at the discontinuity for students whose mothers have higher levels of education, as compared to the rate for students with mothers who have less than a high school degree – the difference-in-difference estimate for each of the maternal education groups. γ provides the counterfactual of the difference in retention probability for students of differing maternal education whose score just makes the promotion cutoff.

Data Collection and Analysis: The data for our analyses are drawn from two sources. The first are natality data provided by the Florida Department of Health. These data cover the universe of births in the state of Florida between the years of 1992 and 2002. At the time of each birth the mother and her health care provider complete a survey which covers maternal demographic information, pregnancy behaviors, and infant health at birth. The data report the mother's age, years of education, race, place of birth, place of residence, and marital status; behaviors during pregnancy such as tobacco and alcohol usage and prenatal care; information on prior births (if any); and information on birth outcomes.

These data are then matched to educational data containing information on all Florida students attending public schools from the 2002-03 through 2008-2009 school years. The educational data include information on the school the child attended, student characteristics such as ethnicity, gender, free or reduced price lunch eligibility, special education classification, English proficiency, and FCAT reading and math scores. Unlike other studies relying solely on educational records, the matching of these data to birth records gives us a unique opportunity to explore whether maternal education and other socioeconomic characteristics including marital status, age, and country of origin, impact children's likelihood of receiving a retention exemption. Of the data used to create variables for our analyses the following come from children's birth records: maternal education, maternal country of origin, maternal marital status, maternal birth date, child birth date, and child birth weight. Child race, free or reduced price lunch status, disability, limited English proficiency, and all test score data come from educational records. Because maternal education and marital status may change over time it is important to note that our measures are taken at the time the child was born, not at the time they entered third-grade.

Findings / Results: Although the Florida retention policy is intended to be a universal policy, students may gain an exception in a number of ways - thus, parents who are aware of the rules are able to request an exemption for their child. We find that the more educated a student's mother is the less likely she is to be retained due to the Florida policy. Scoring below the promotion cutoff results in an increase in retention probability that is 20 percent larger for students whose mothers have less than a high school degree than for students whose mothers have a bachelor's degree or more. Specifically, students with more educated parents are more often granted exemptions to the retention policy by presenting a portfolio of their work judged to be at grade level. Students are also more likely to be retained due to the policy if they are black, male, qualify for free or reduced price lunch, or if their mother is foreign born.

Conclusions: Our results have important implications for public policy. Broad, universal educational policies are often implemented to address inequalities in outcomes for students of differing backgrounds by holding all children to the same standards. Although the allowance for exemptions in the Florida retention policy is in place in order to avoid retaining students for whom retention is seen to be harmful or inappropriate, it is important to understand whether an unintended consequence of this allowance is that children are being retained differentially based on their mother's education, or other characteristics which should not impact whether or not the policy is appropriate for them. Although we cannot discern the exact reason why Florida's retention policy is more strictly enforced for the children of less educated, poor, and foreign born women from our study, prior research findings that parents of lower socioeconomic status have less knowledge of their children's educational context and are less likely to intervene in school decisions lead us to hypothesize that these same dynamics are at play in this context. We are not able to completely rule out the possibility that there are unobservable differences in students that are related to their mothers' socioeconomic background and which influence whether teachers and school administrators grant students an exemption from the policy. By using a regression discontinuity design and looking at children just at the margin, however, our estimates provide the difference in retention probability for students of different backgrounds who are just impacted by the policy subtracting out any differences between those same groups of students who are just above the promotion cutoff. Differences by maternal education level are apparent but very small for children above the promotion cutoff though these children would be subject to any inherent socioeconomic differences in schools' or families' desire to retain the student. Furthermore, when examining differences in retention probability during the two-years before the policy was enacted we also find much smaller differences. It therefore appears that the allowance for exemptions into Florida's test-based promotion policy has resulted in differential policy implementation by socioeconomic status, allowing parents with greater knowledge, agency, and resources the ability to circumvent the policy in greater numbers and exacerbating any differences in retention that are present in the absence of the policy.

Appendices

Appendix A. References

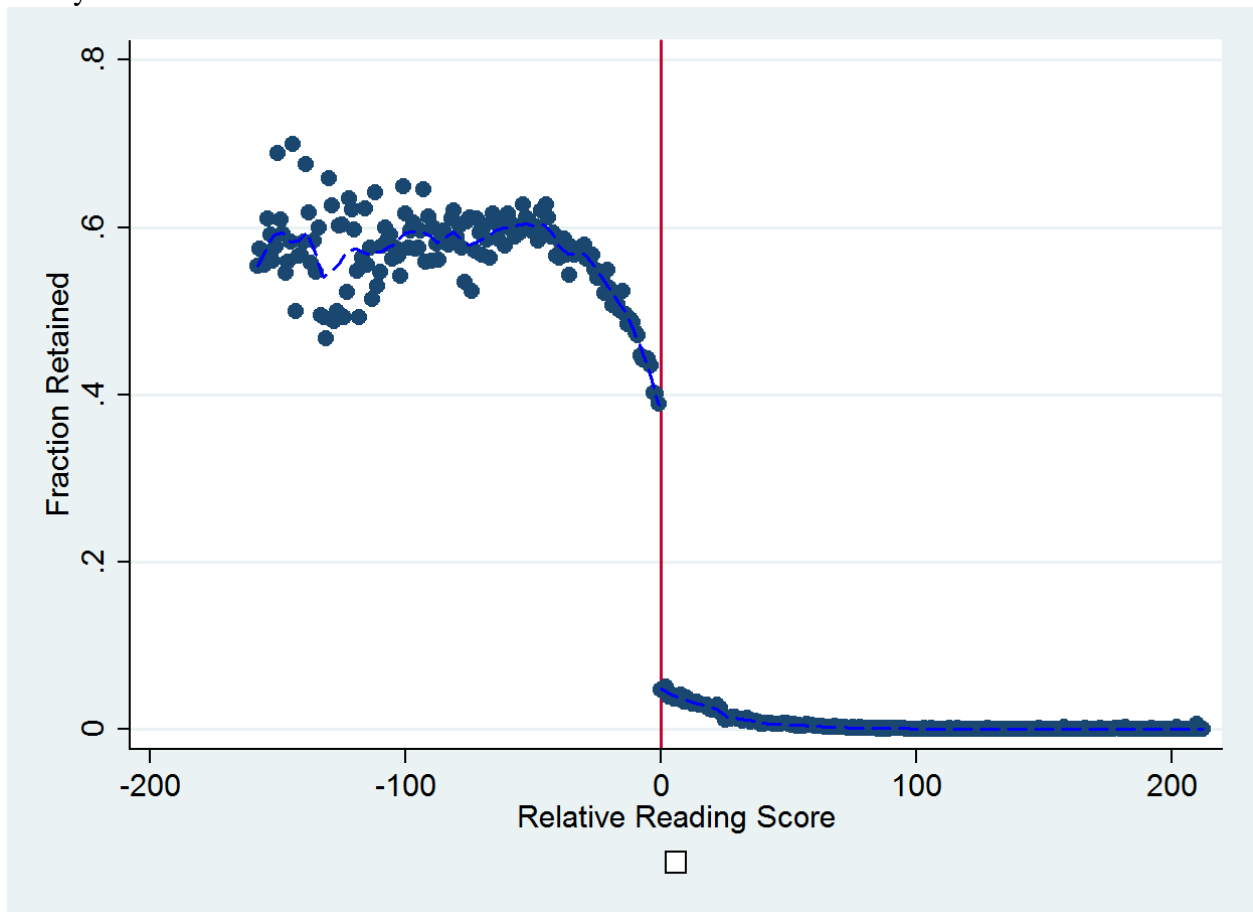
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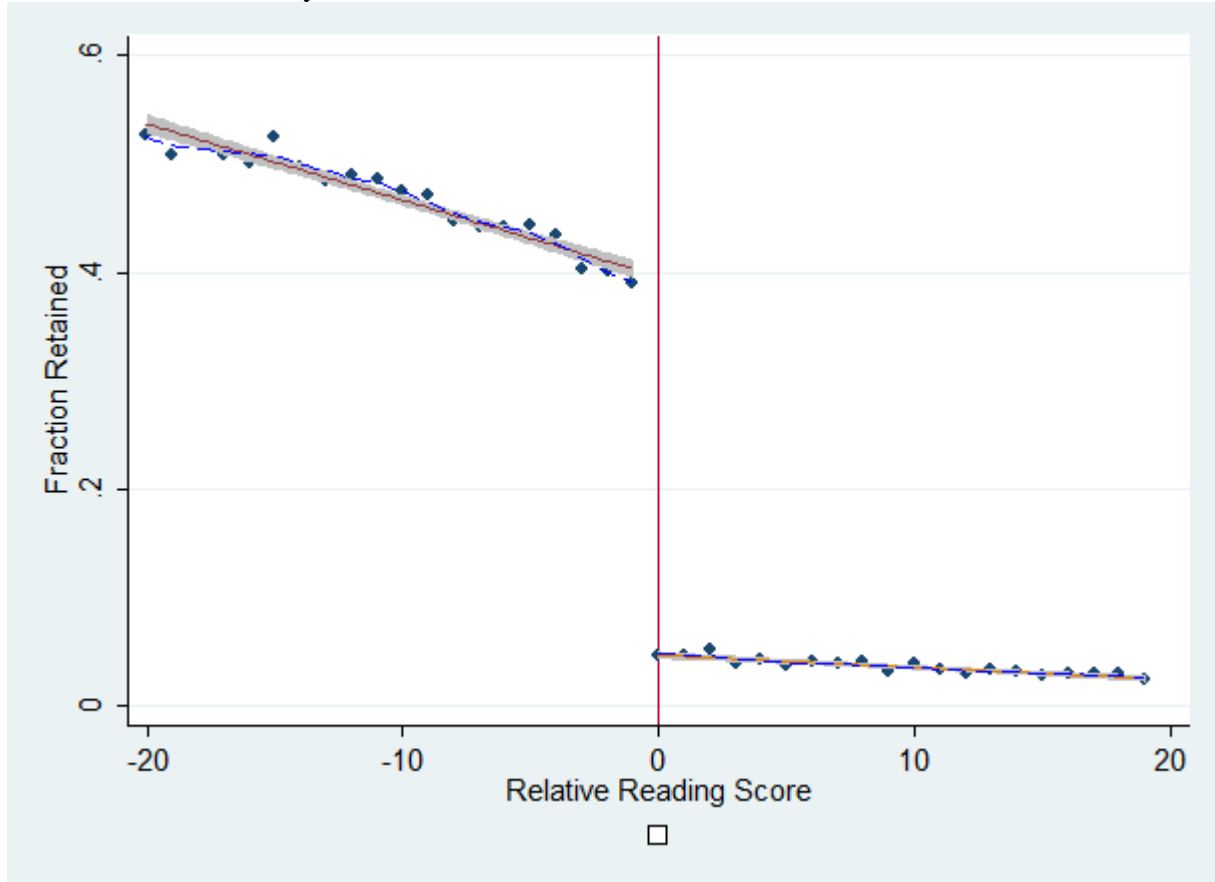
Appendix B. Tables and Figures

Figure 1. The Relationship between Third-Grade Reading Scores and Grade Retention – After Policy



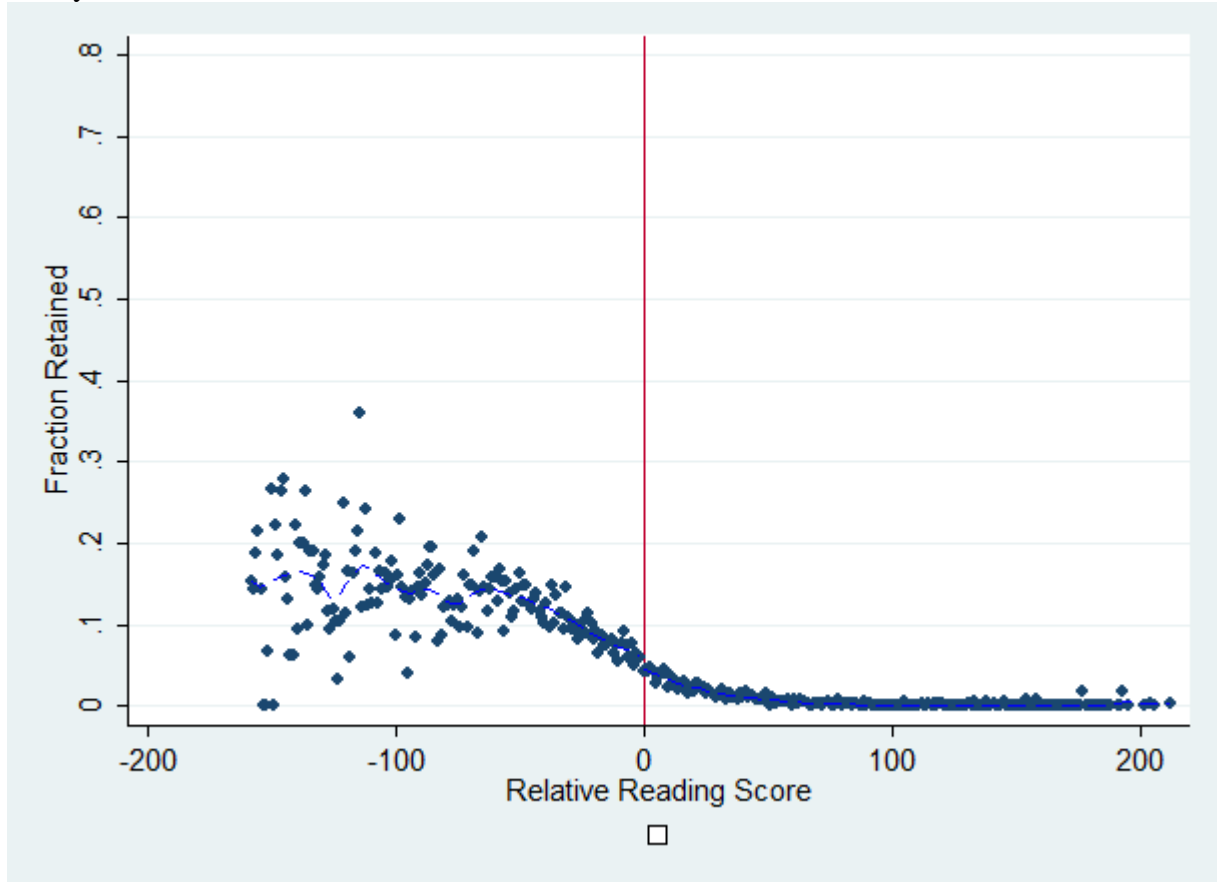
Based on 2002-2009 Cohorts. Dashed-line represents local-linear regression on both sides of the cutoff.

Figure 2. The Relationship between Third-Grade Reading Scores and Grade Retention Around the Cutoff– After Policy



Based on 2002-2009 Cohorts. Discontinuity sample with 20-point bandwidth. Solid line represents predicted values from linear regression and shaded area represents 95% confidence interval. Dashed line represents predicted values for local linear regression on both sides of the cutoff.

Figure 3. The Relationship between Third-Grade Reading Scores and Grade Retention – Before Policy



Based on 2000-2001 Cohorts. Dashed-line represents local-linear regression on both sides of the cutoff.

Figure 4. Distribution of Third Grade Reading Scores

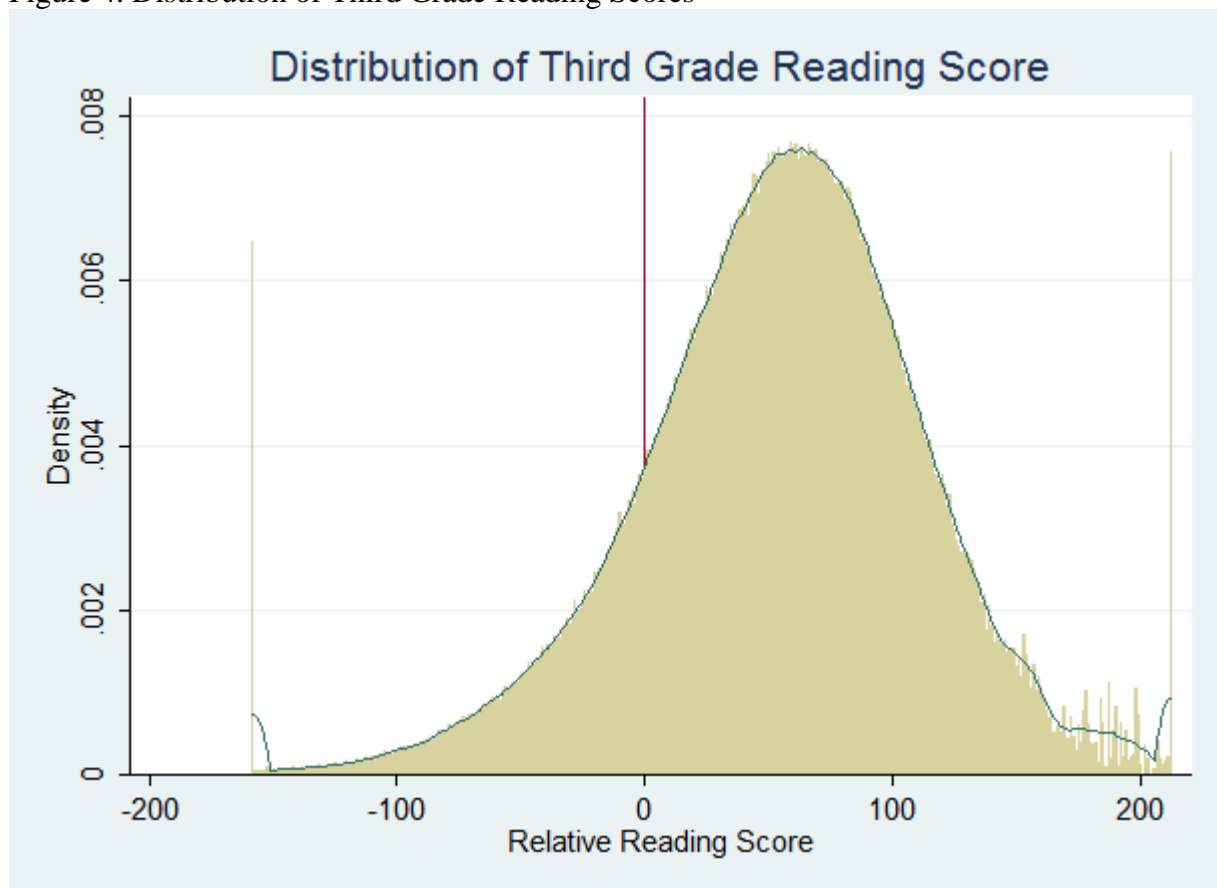
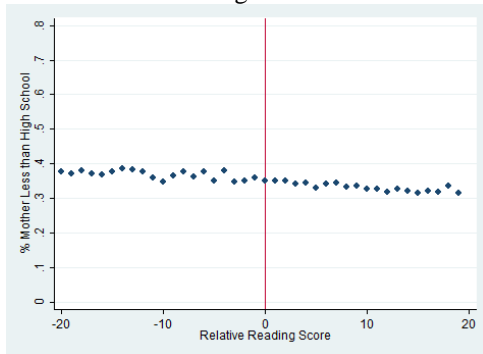
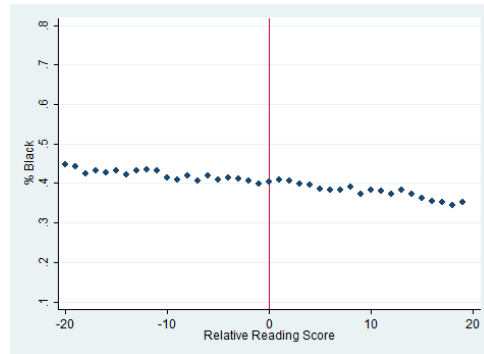


Figure 5. The Relationship between Reading Scores in Third Grade and Student Characteristics

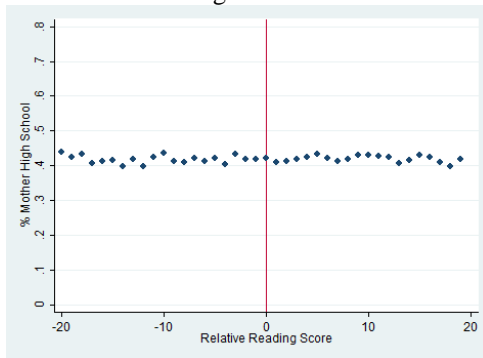
Fraction Mother < High School



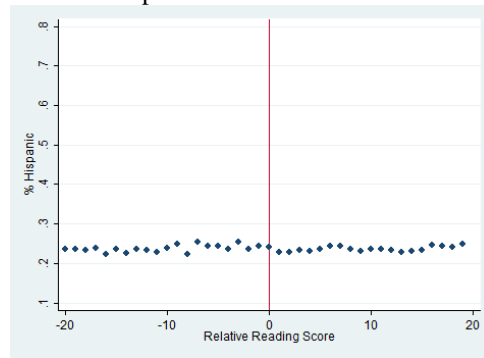
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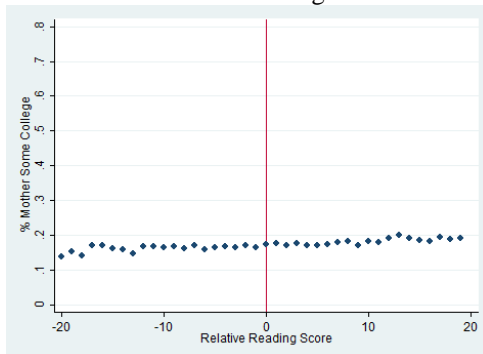
Fraction Mother High School



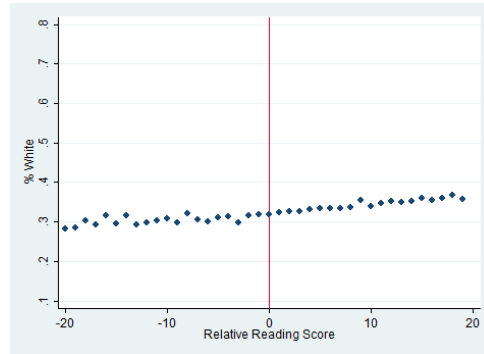
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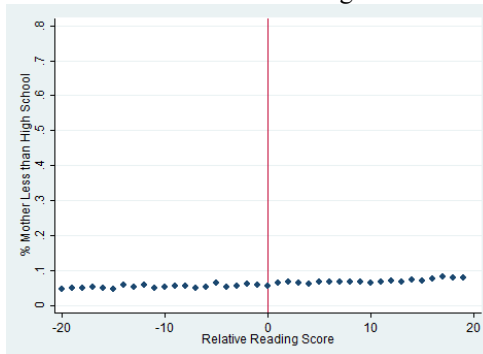
Fraction Mother Some College



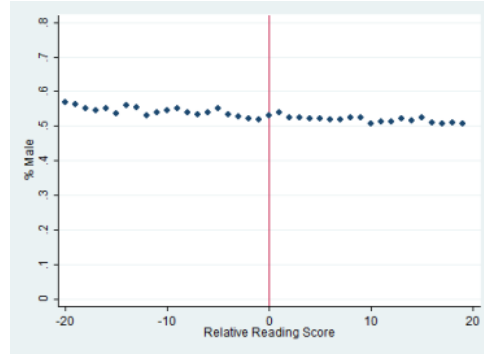
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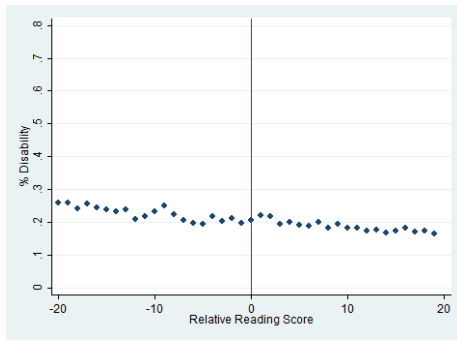
Fraction Mother Bachelor's Degree



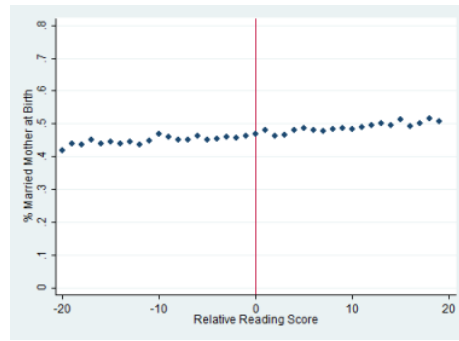
Fraction Male



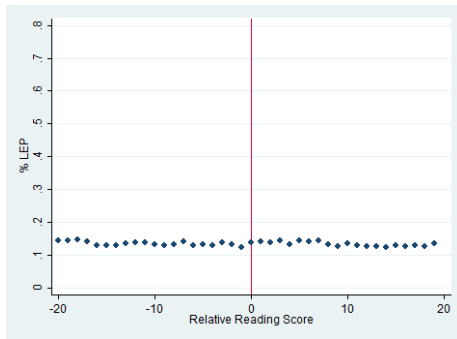
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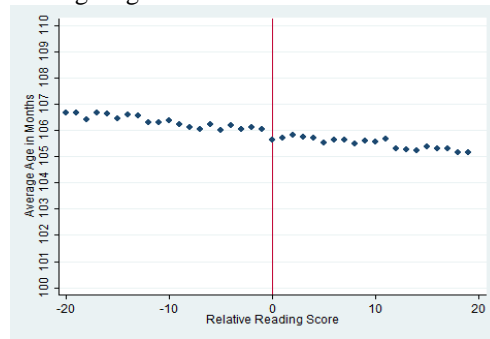
Fraction Married Mother



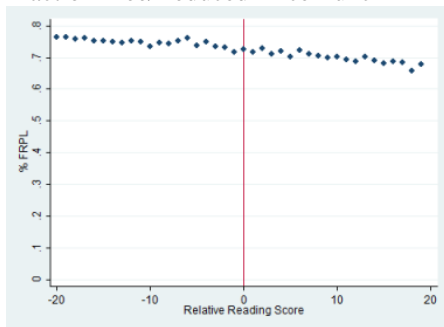
Fraction LEP



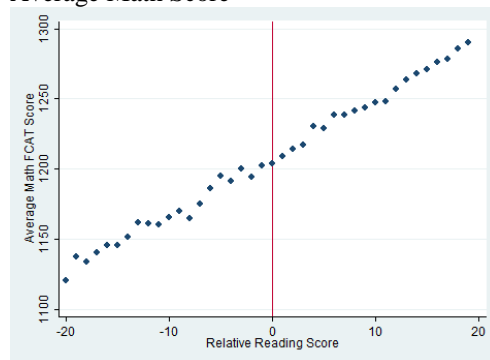
Average Age



Fraction Free/Reduced Price Lunch



Average Math Score



Average SAT10 Reading Score

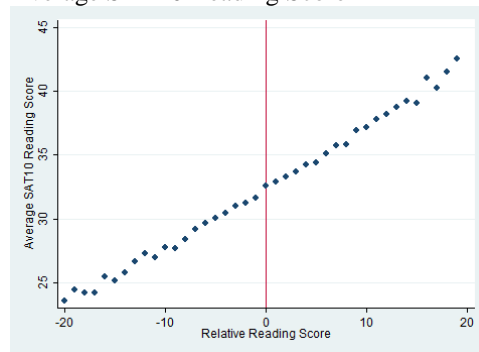
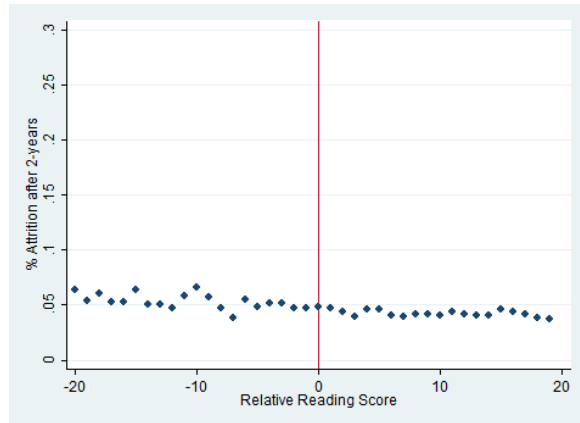
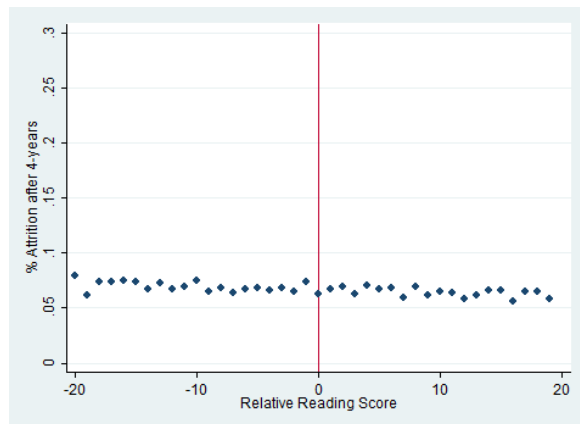


Figure 6. The Relationship between Reading Scores in Third Grade and Later Attrition

Attrition 2-Years Later



Attrition 4-Years Later



Attrition 7-Years Later

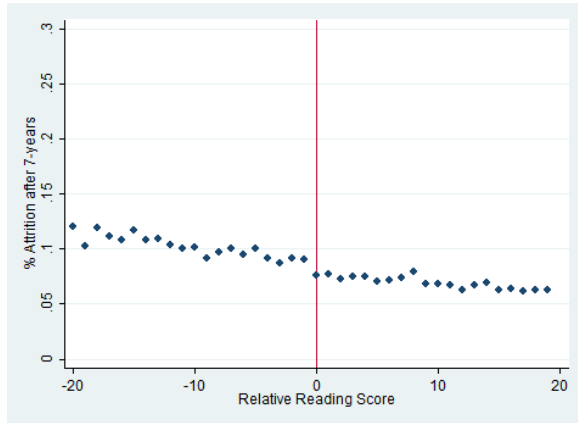


Figure 7. The Relationship between Third-Grade Reading Scores and Grade Retention Around the Cutoff by Maternal Education – After Policy

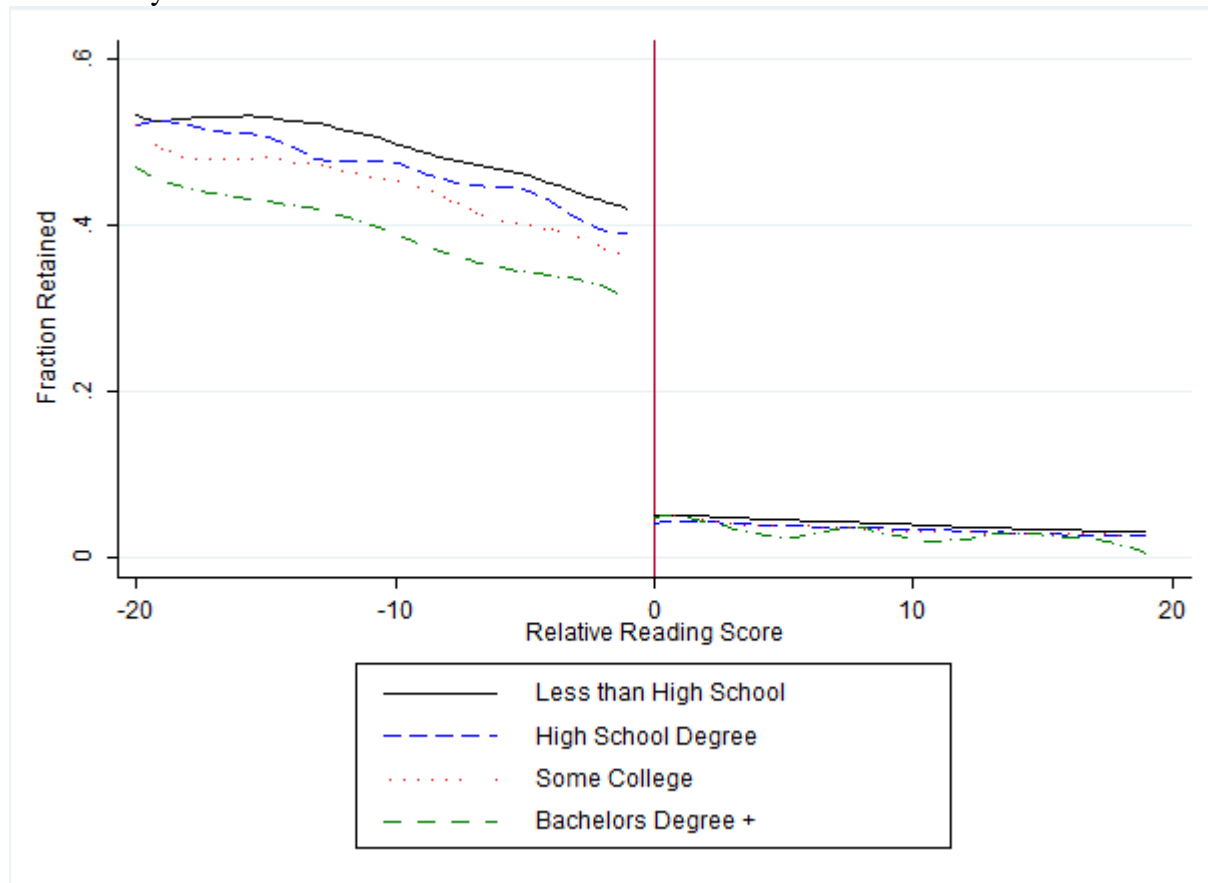


Figure 8. The Relationship between Third-Grade Reading Scores and Grade Retention Around the Cutoff by Maternal Education – Before Policy

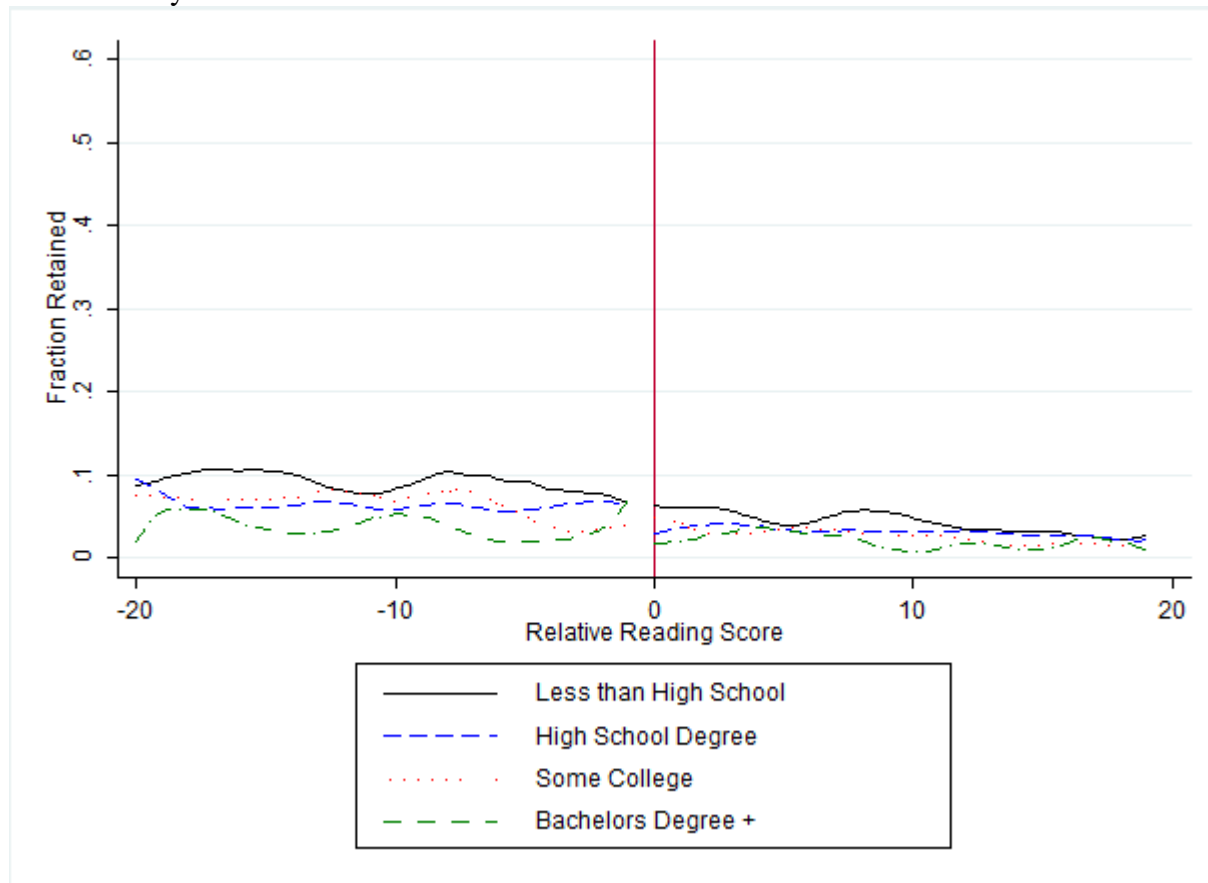


Table 1. Summary Statistics by Cohort Year

	Before Policy			After Policy								
	2000	2001	Total	2002	2003	2004	2005	2006	2007	2008	2009	Total
Total	59,849	107,248	167,097	112,380	108,498	110,093	113,345	117,445	120,989	121,751	126,105	930,606
% Below	23.72	23.8	23.77	21.17	18.59	16.9	11.73	16.21	13.79	14.33	14.18	15.79
% Retained	3.38	3.36	3.37	15.04	11.56	9.87	6.75	7.89	7.33	7.98	7.01	9.1
% of Below Retained	10.39	11.16	10.89	67.13	58.27	54.77	51.83	45.24	48.64	51.63	44.56	53.44
% Above Retained	1.20	0.92	1.02	1.05	0.9	0.74	0.76	0.67	0.73	0.68	0.81	0.79

Table 2. Summary Statistics by Maternal Education: Before Policy vs. After

	Before Policy				After Policy			
	Less than High School	High School	Some College	Bachelors Degree +	Less than High School	High School	Some College	Bachelors Degree +
Total	39,160	69,196	36,689	22,052	216,730	352,732	212,712	148,432
% Below	38.65	24.56	16.05	7.72	27.56	16.92	9.91	4.31
% Retained	6.23	3.35	1.91	0.74	16.06	9.78	5.6	2.33
% of Below Retained	12.98	10.37	8.37	6.11	54.66	53.61	51.28	47.61
% Above Retained	1.98	1.07	0.68	0.29	1.38	0.85	0.58	0.29

Table 3. Descriptive Statistics				
	2000-2009	2002-2009		
	All	All	Below cutoff: Retained	Below Cutoff - Promoted
Fraction maternal education less than high school	23.31 (0.423)	23.29 (0.423)	41.59 (0.493)	39.6 (0.489)
Fraction maternal education high school	38.44 (0.486)	37.9 (0.485)	40.76 (0.491)	40.48 (0.405)
Fraction maternal education some college	22.72 (0.419)	22.86 (0.420)	13.77 (0.345)	15.02 (0.357)
Fraction maternal education Bachelors degree or more	15.53 (0.362)	15.95 (0.366)	3.88 (0.193)	4.9 (0.216)
Fraction limited English proficient	8.04 (0.272)	8.25 (0.275)	15.04 (0.357)	13.38 (0.341)
Fraction disabled	14.25 (0.350)	14.47 (0.352)	26.53 (0.442)	44.51 (0.497)
Fraction free or reduced price lunch	52.58 (0.499)	53.27 (0.499)	79.68 (0.402)	76.19 (0.426)
Foreign born mother	24.56 (0.430)	25.07 (0.433)	28.21 (0.450)	24 (0.427)
Fraction married mother	61.62 (0.486)	61.02 (0.488)	40.94 (0.492)	43.83 (0.496)
Average age of mother at birth	26.67 (6.21)	26.70 (6.24)	24.91 (6.14)	25.03 (6.12)
Fraction Black	25.16 (0.434)	25.01 (0.433)	46.59 (0.499)	41.26 (0.492)
Fraction White	49.59 (0.500)	49.02 (0.500)	26.00 (0.439)	32.72 (0.469)
Fraction Hispanic	20.53 (0.404)	21.03 (0.408)	24.33 (0.429)	22.36 (0.417)
Fraction Other Race/Ethnicity	4.71 (0.212)	4.94 (0.217)	3.08 (0.173)	3.66 (0.188)
Fraction male	50.14 (0.501)	50.36 (0.500)	58.02 (0.493)	59.36 (0.491)
Average age of child in months	104.33 (5.58)	104.66 (5.73)	105.68 (6.36)	109.56 (7.64)
Average child birth weight	3,316.14 (617.28)	3,310.80 (620.59)	3,231.52 (677.91)	3,228.19 (681.43)
Average third grade FCAT reading score	1366.24 (371.46)	1381.29 (366.53)	782.54 (236.38)	818.48 (235.40)
Average third grade FCAT math score	1,404.10 (293.93)	1,420.81 (291.11)	1,027.71 (270.64)	1,105.17 (280.39)
Average third grade SAT10 percentile rank	59.02 (27.48)	59.29 (27.38)	18.22 (11.14)	22.75 (15.64)
Observations	1,097,703	930,606	78,508	68,401

Note: Standard deviations are in parentheses.

Table 4. Association Between Student Background Characteristics and the Likelihood of Being Retained in the Face of Failing to Meet Promotion Cutoff		
	I	II
Maternal education - high school	-0.034** (0.003)	-0.023** (0.003)
Maternal education - some college	-0.066** (0.004)	-0.043** (0.004)
Maternal education - Bachelors degree or more	-0.105** (0.007)	-0.066** (0.007)
Limited English Proficiency	0.012* (0.005)	-0.004 (0.004)
Disabled	-0.104** (0.003)	-0.169** (0.003)
Free or reduced price lunch	0.035** (0.003)	0.023** (0.003)
Foreign born mother	0.010** (0.004)	0.016** (0.004)
Married mother	-0.008** (0.003)	-0.004 (0.003)
Mother's age at birth	0.000 (0.000)	0.000 (0.000)
Black	0.038** (0.003)	0.012** (0.003)
Hispanic	0.008* (0.004)	0.003 (0.004)
Male	0.027** (0.003)	0.029** (0.002)
Age in months	-0.018** (0.000)	-0.018** (0.000)
Infant birth weight	-0.000** (0.000)	-0.000 (0.000)
Observations	146,909	146,909
Controls for Achievement	No	Yes

Notes: Robust Standard Errors in parentheses. Estimates obtained from OLS regressions on all students who scored below the promotion cutoff between for 2002-2009 cohorts. All models include full demographic controls listed in top panel of Table 2. The following indicate significance: (** p<0.01, * p<0.05, + p<0.1).

Table 5. Effect of Scoring Below the Promotion Cutoff on Retention in Third Grade						
	I	II	III	IV	V	VI
below	0.349** (0.004)	0.375** (0.007)	0.439** (0.009)	0.373** (0.010)	0.356** (0.016)	0.358** (0.017)
maternal ed high schoolXbelow		-0.026* (0.010)	-0.025* (0.010)	-0.016 (0.010)	-0.017+ (0.010)	-0.015 (0.010)
maternal ed some collegeXbelow		-0.055** (0.013)	-0.049** (0.013)	-0.034** (0.013)	-0.037** (0.014)	-0.032* (0.014)
maternal ed bachelors or moreXbelow		-0.110** (0.019)	-0.090** (0.019)	-0.062** (0.019)	-0.061** (0.020)	-0.060** (0.021)
lepXbelow			0.012 (0.012)	0.013 (0.012)	-0.014 (0.014)	-0.023 (0.015)
disabilityXbelow			-0.122** (0.010)	-0.127** (0.010)	-0.099** (0.010)	-0.092** (0.011)
sat10 reading > 51st ptileXbelow			-0.151** (0.008)	-0.130** (0.008)	-0.132** (0.008)	-0.145** (0.009)
fcatt mathXbelow				-0.000** (0.000)	-0.000** (0.000)	-0.000** (0.000)
blackXbelow					0.032** (0.011)	0.027* (0.011)
hispanicXbelow					0.002 (0.013)	0.005 (0.013)
maleXbelow					0.047** (0.008)	0.046** (0.008)
age in monthsXbelow					-0.007** (0.001)	-0.006** (0.001)
birth weightXbelow					-0.000 (0.000)	-0.000 (0.000)
frplunchXbelow					0.033** (0.010)	0.033** (0.011)
mother foreign bornXbelow					0.045** (0.011)	0.042** (0.012)
mother marriedXbelow					-0.003 (0.009)	-0.002 (0.009)
mother's ageXbelow					-0.001 (0.001)	-0.001 (0.001)
Observations	139,960	139,960	139,960	139,960	139,960	139,960
Number of School X Year						14,900
Maternal Education	No	Yes	Yes	Yes	Yes	Yes
LEP/Disability/SAT10>51st percentile	No	No	Yes	Yes	Yes	Yes
Third Grade FCAT Math Score	No	No	No	Yes	Yes	Yes
Student/Family Characteristics	No	No	No	No	Yes	Yes
School by Year Fixed Effects	No	No	No	No	No	Yes

Notes: Columns 1-6 include robust standard errors in parentheses; Column 7 standard errors are clustered by schoolXyear. Discontinuity estimates are obtained parametrically using a degree of 1 and within 20 points of the promotion cutoff. The following indicate significance: (** p<0.01, * p<0.05, + p<0.1).

Table 6. Effect of Scoring Below the Promotion Cutoff on Retention in Third Grade - Before vs After Policy

	Before	After
Below	-0.001 (0.022)	0.358** (0.017)
Maternal education - high school	-0.017* (0.008)	-0.010** (0.004)
Maternal education - some college	-0.019* (0.009)	-0.006 (0.005)
Maternal education - Bachelors degree or more	-0.021+ (0.012)	-0.010 (0.008)
Maternal ed high schoolXbelow	0.008 (0.013)	-0.015 (0.010)
Maternal ed some collegeXbelow	-0.013 (0.016)	-0.032* (0.014)
Maternal ed bachelors or moreXbelow	-0.013 (0.021)	-0.060** (0.021)
Observations	31,647	139,960
Number of School X Year	3,346	14,900

Notes: Standard errors clustered by schoolXyear given in parentheses. Discontinuity estimates are obtained parametrically using a degree of 1, within 20 points of the promotion cutoff, and including all interacted controls and school by year fixed effects found in Table 4 Column 7. The following indicate significance: (** p<0.01, * p<0.05, + p<0.1).

Table 7. Subgroup Effects of Scoring Below the Promotion Cutoff on Retention in Third Grade

	below	maternal ed high schoolXbelow	maternal ed some collegeXbelow	maternal ed bachelors or moreXbelow	Observations	SchoolXYear
Race						
All	0.367** (0.016)	-0.014 (0.010)	-0.030* (0.014)	-0.058** (0.021)	139,960	14,900
White/Other	0.375** (0.028)	-0.030 (0.020)	-0.043+ (0.025)	-0.065+ (0.035)	51,507	11,919
Black	0.362** (0.030)	-0.008 (0.016)	-0.022 (0.023)	-0.069 (0.044)	55,248	10,930
Hispanic	0.365** (0.037)	-0.004 (0.022)	-0.057+ (0.029)	-0.045 (0.043)	33,205	8,589
School Average Maternal Education - Distribution Quintile						
All	0.358** (0.017)	-0.015 (0.010)	-0.032* (0.014)	-0.060** (0.021)	139,960	14,900
Q1	0.366** (0.034)	-0.002 (0.017)	-0.057* (0.028)	-0.115* (0.057)	41,940	3,524
Q2	0.345** (0.034)	-0.010 (0.019)	-0.017 (0.029)	-0.055 (0.051)	34,726	3,201
Q3	0.345** (0.038)	-0.035 (0.024)	-0.028 (0.031)	-0.066 (0.048)	27,135	2,937
Q4	0.371** (0.043)	-0.005 (0.030)	-0.019 (0.036)	-0.056 (0.047)	21,881	2,749
Q5	0.421** (0.058)	-0.066 (0.047)	-0.077 (0.050)	-0.083 (0.058)	14,278	2,489
Proportion of School Free/Reduced Price Lunch - Distribution Quintile						
All	0.358** (0.017)	-0.015 (0.010)	-0.032* (0.014)	-0.060** (0.021)	139,960	14,900
Q1	0.415** (0.056)	-0.085* (0.044)	-0.110* (0.049)	-0.105+ (0.058)	14,739	2,529
Q2	0.429** (0.044)	-0.050 (0.031)	-0.032 (0.037)	-0.071 (0.049)	21,258	2,687
Q3	0.312** (0.038)	0.002 (0.024)	0.043 (0.031)	-0.024 (0.047)	26,783	2,888
Q4	0.361** (0.033)	-0.016 (0.019)	-0.073** (0.028)	-0.072 (0.049)	33,721	3,180
Q5	0.340** (0.039)	0.002 (0.016)	-0.037 (0.026)	-0.092+ (0.051)	43,459	3,616

Notes: Standard errors clustered by schoolXyear given in parentheses. Discontinuity estimates are obtained parametrically using a degree of 1, within 20 points of the promotion cutoff and including all interacted controls and school by year fixed effects found in Table 4 Column 7. Race subgroup estimates do not include controls or interactions for race. The following indicate significance: (** p<0.01, * p<0.05, + p<0.1).